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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/777,531

02/12/2004

Mark Charles Davis

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11/01/2006

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EXAMINER

SCHLIE, PAUL W

ART UNIT

PAPER NUMBER

2186

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/777,531 | Applicant(s) DAVIS ET AL. | |
| | Examiner Paul W. Schlie | Art Unit 2186 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 36-61 have been examined as amended, with claims 1-35 being canceled, and claims 36-61 being newly presented.

Response to Arguments

2. Applicant's arguments filed 8/23/06 have been fully considered but are not persuasive or moot in view of their rejection necessitated by amendment. As per the previous 6/23/06 Response to Arguments, Krum et al. is considered to teach a RAID disk sub-enclosure "chassis" being equivalent to that described as being a "carrier package" within the applicant's disclosure, and as the "chassis" taught by Krum et al. is intentionally capable of conforming to the standard form factor of otherwise standard drives (see abstract and figure 1), it's considered implicitly intentionally capable of being mounted in any enclosure otherwise capable of supporting a potential plurality of standard disk drives; thereby considered equivalent to that claimed by the applicant and previously rejected, in view that the applicant's newly introduced claims are considered equivalent in scope to those previously rejected.

Further, as it is presently clear that the pending claims within this application are obvious in view of that claimed within a co-pending application being simultaneously prosecuted, the claims are also being provisionally rejected under obviousness double patenting as detailed below; and whose rejection is considered orthogonal to their final rejection over the art of record.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 36-61 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 26-38 of copending Application No. 10/777,529. Although the conflicting claims are not identical, they are not patentably distinct from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 36-61, are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Krum et al. (5,777,845).

As per independent claims 36, 46, 49, 58, Krum et al. teaches a storage system package, and/or method comprising: a carrier housing for holding an aggregating RAID controller and multiple storage devices proximate to each other that it may be configured to appear as at least one single aggregated logical storage unit (being inherent of a so configured multi-drive RAID configuration, where such a controller configured to RAID-0 correspondingly logically stripes data across multiple drives such that any logical block may be deterministically mapped to a corresponding physical block within a particular drive, and thereby effectively "virtualizing" their addressing) through a single otherwise standard interface, and thereby may correspondingly compose a storage system comprising a plurality of so packaged logical storage units by mounting and providing each with the primary power, control, and signaling as would be correspondingly inherent to any multi-element storage system, inclusive of a RAID configuration if so desired (see abstract, figures 1-7, column 1 lines 41-45, and column 2 lines 25-39). Limitations potentially not otherwise explicitly addressed are considered

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correspondingly clearly inherent in that taught, obvious to one of ordinary skill in the art at the time of the claimed invention, and/or not sufficient to patentably distinguish over prior art.

As per claims 37-45, 47-48, 50-57 and 59-61, being dependant on claim 36, 46, 49, 58, or correspondingly dependant claim; Krum et al. further teaches that a spring loaded bracket may hold said storage devices in place (see figures 5-7); but does not explicitly teach that such a packaged configuration may contain fault indicators; however the support of failure detection and/or recovery is considered inherent in a RAID based controller as taught, and official notice is given that fault indicators are commonly understood and deployed as prior art (as depicted in figure 3 in that taught by Holland et al. 5,367,669 although not explicitly cited as the basis of the rejection), and thereby considered an obvious design choice by one of ordinary skill in the art at the time of the claimed invention to include in such a packaged storage unit, for the benefit of enabling the identification of a faulty drive and/or failure mode as deemed required, and utilizing any well understood standardized storage interface for it's intended purpose. Limitations potentially not otherwise explicitly addressed is correspondingly considered clearly inherent in that taught, obvious to one of ordinary skill in the art at the time of the claimed invention, and/or insufficient to patentably distinguish over prior art.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul W. Schlie whose telephone number is 571-272-

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6765, or whose email address is [paul.schlie@uspto.gov]. The examiner can normally be reached on Mon-Thu 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 517-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PIERRE BATAILLE
PRIMARY EXAMINER

10/26/06